

Youth Farmer Breaks with Tradition to Double Milk Production

USDA FUNDED MARKET-ORIENTED DAIRY PROJECT EMPOWERS SRI LANKAN FARMERS WITH PRACTICAL KNOWLEDGE

Sri Lanka's 'hill country', the mountainous region in the center of the island, offers the best climatic conditions for dairy farming. But the advantages end there. Small- and medium-scale dairy farmers in the region have access to very little land and the hilly terrain limits space for proper cattle sheds and fodder cultivation.

Many small- to medium-scale dairy farmers in the area live on tea plantations and raise their cattle in community sheds. Mr. Subramaniam Prasath from Ramboda in the Central Province was one such farmer producing a very modest 22 liters per day on average. Mr. Prasath raised his dairy cows in a confined common housing shed shared with ten of his fellow dairy farmers. These farmers were unaware that these conditions were far from ideal for raising productive dairy cows.



BEFORE: The communal cattle shed with low and only open spaces covered to protect the animals from 'evil eye'. Lack of ventilation affects animal comfort, increases chances of illnesses and reduces ability to produce more milk.



AFTER: The new shed allows adequate ventilation, reduces heat stress and risk of illness while improving cow comfort and increasing milk yield.

In January 2020, Mr. Prasath attended a training session conducted by the United States Department of Agriculture (USDA) funded Market-Oriented Dairy (MOD) project. During this training, he realized that the traditional approaches to dairying that had been handed down to him were contrary to the accepted best practices of modern dairy farming. This knowledge encouraged him to change his circumstances. "He was determined to overcome the challenges and adopt the best practices to improve farm productivity. He took full advantage of MOD's post-training mentoring and monitoring visits including calls to seek clarification," said Mr. Satheeskanth, MOD's field officer in the region.

The primary challenge in his journey to increase milk production was the confined space of his existing cattle shed, which lacked adequate ventilation, impacting cow comfort and milk production. With the limited space available, Mr. Prasath rebuilt his cattle shed incorporating features recommended by MOD to increase ventilation and improve access to feed and water.



BEFORE: Feed troughs in the old shed. Maintaining cleanliness and freshness of feed is a major challenge.



AFTER: Feed troughs in the new shed. Allows easy access for the animals as well as the farmer to maintain cleanliness and refilling of feed.



Mr. Prasath's Super Napier cultivation, chaff cutter to cut grass, stock of silage bales purchased to supplement feed and feed trough to facilitate TMR feeding and reduce wastage.

The second challenge Mr. Prasath had to optimize milk yields was inadequate feed and water. To address the need for water 24/7, he initially started by gathering clean water in buckets throughout the day. Recently, with the support of strategic investments provided by MOD, he installed five auto-drinkers which allow the animals to drink water as needed. He also started cultivating Super Napier grass using cuttings provided by MOD in a half-acre plot. With MOD's guidance he started using the chaff cutter he already owned to chop grass to the ideal size and to feed his cows using the Total Mixed Ration (TMR) method promoted by MOD. To supplement his own grass cultivation, he started purchasing 2,000 kg of silage every other month from a silage entrepreneur developed and introduced to him by MOD. "I am glad I changed my ways, just these measures alone increased the yields by 3-4 liters per day per milking animal. Today, I get about 55 liters a day on average," said Mr. Prasath. "In addition, the cut-and-feed method reduced wastage of grasses by nearly 30 percent, saving me money and the time and effort I

spend to gather the grasses,” he added. Mr. Prasath’s next target is to reach 80 liters per day by December 2022.

Seeing Mr. Prasath’s success, two other dairy farmers from the communal shed have also begun the process to prepare separate sheds and follow best practices. Speaking on this developing trend, Mr. Satheeskanth explained, “Normally MOD does not promote investment in improving the sheds until other best practices have been addressed, but in the upcountry areas, the traditional method of raising animals in a poorly ventilated, cramped space is quite a hindrance to animal comfort and increasing milk yields. Under these circumstances, we encourage making these changes early and the farmers see the results instantly.”

MOD has trained 6,108 dairy farmers in dairy management best practices to date. An independent survey conducted reveals that 55 percent of the farmers provide clean drinking water throughout the day, 49 percent grow their own fodder, with 19 percent making their own silage and another 9 percent purchasing silage. One third of those surveyed use the TMR feeding method, resulting in 60 percent of the dairy farmers confirming that they provide better nutritious feed to animals throughout the year due to MOD interventions.

Market-Oriented Dairy (MOD) Project, based in Sri Lanka, is funded by the United States Department of Agriculture (USDA) ‘Food for Progress’ initiative and implemented by IESC. The project aims to double the milk production of participating dairy farmers and enable them to obtain a higher price premium for fresh milk through interventions primarily designed to enhance their technical knowledge and create an entrepreneurial, business-oriented mindset. The project also supports enterprises along the dairy value chain to meet the demands of the country’s dairy sector to catalyze a sustainable growth. The project’s sub-partners are Sarvodaya, University of Florida, and Global Dairy Platform.